

PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program Implementation Grant, Round 2, 2013

Applicant	Tehachapi-Cummings County Water District	Amount Requested	\$ 8,011,898
Proposal Title	Kern IRWM Group Implementation Grant	Total Proposal Cost	\$ 9,151,864

PROJECT SUMMARY

The proposal includes five projects: (1) Urban Bakersfield Water Use Efficiency Project, (2) Tehachapi Regional Water Use Efficiency Project, (3) Snyder Well Intertie for Irrigation and Nitrate Removal Project, (4) Kern Water Bank Recharge and Recovery Enhancement Project, and (5) Sycamore Road Flood Reduction Project.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	15/15	Technical Justification	8/10
Budget	4/5		
Schedule	5/5	Benefits and Cost Analysis	21/30
Monitoring, Assessment, and Performance Measures	4/5	Program Preferences	10/10
Total Score (max. possible = 80)			67

EVALUATION SUMMARY

WORK PLAN

The work plan criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The work plan states the goals and objectives of the proposal and how it helps achieve the goals and objectives of Kern's IRWM Plan. A tabulated overview of each project including project abstract and status and a map of the relative projects are included. The work plan describes each project and its tasks in detail. Projects are consistent with the Basin Plan and will be operational as standalone projects. Each project's tasks include adequate reporting submittals and collectively the tasks implement the proposed projects. The work plan also includes a list of required permits and the status of environmental documentation.

BUDGET

The budgets for all of the projects in the proposal have detailed cost information, and the costs are considered reasonable. However, some of the project budgets lack supporting documentation or adequate descriptions for the

estimates included in Attachment 4. For example, Project 3 (Table 4.3.3) and Project 4 (Table 4.4.3) budgets do not include back-up information for estimates in the tables.

Additionally, Project 5's budget does not match the work plan. For example, the work plan (Task 13.1) includes attorney review of contract document fees (pg. 3-114), but the budget does not include this cost (pg. 4-32).

SCHEDULE

The schedule criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. Each schedule's tasks are consistent with the work plan and budget and are considered reasonable. The schedule conveys at least one project will be ready to begin construction no later than October 2014.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is fully addressed but is not supported by thorough documentation. Not all of the project goals and objectives listed in the work plan are included in the goals and desired outcomes in the monitoring, assessment, and performance attachment. For example, Project 1 is does not include the goal to "reduce energy use and carbon emissions by reducing pumping and treatment for water and wastewater, and reducing hot water end use" which can be found on page 3-25 and is referred to in the Technical Justification attachment. The monitoring and assessment tools and methods that are included are adequate to track progress toward meeting targets, and it is feasible to meet the targets in the lifetime of the project.

TECHNICAL JUSTIFICATION

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The proposal is technically justified to achieve the claimed benefits and is fully supported by well described physical benefits and documentation that demonstrates the technical adequacy of the projects. The technical analysis is appropriate and justified considering the size of the projects and the type of benefits claimed. However, most of the projects' Table 7 data do not support the narrative description of project benefits that proceeded the table.

BENEFITS AND COSTS ANALYSIS

Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

Benefits of Project 4 are the value of water extracted (avoided purchases of other supplies) and overdraft correction, which is similar to lift reduction benefits. The estimated value of extracted water was based on a multi-step analysis using the first fifty years of results in DWR's 2010 SWP Reliability Study, coupled with a regression analysis of a local expert's opinion of likely water market prices in different year types. It is unclear whether reviewer's concerns would substantially change the monetized benefits claimed. It is unlikely that another revised approach would drop monetized benefits below costs of the project, though it could raise some uncertainty about their magnitude relative to costs. Neither explicit nor opportunity cost of land/easement is included in costs.

Benefits of Projects 1 and 2 are monetized using the avoided variable water rates paid by users. Benefits should be measured as the avoided cost of producing the water or the cost of another supply avoided as a result of the savings. Reviewer revised the calculation for one of the projects, resulting in a small reduction in monetized benefit. Non-monetized benefits include improved water supply reliability (avoiding shortages); reduced landscape runoff; education on water use efficiency (WUE); and helping the suppliers meet state WUE mandates.

Project 3 monetized benefits are the avoided cost of using 65 AF per year of potable supply for landscape irrigation, valued at the variable cost of municipal supply. Reviewer notes that the cost of pumping water from the well does not appear to be included in the cost. Non-monetized benefits include nitrate removal via the pumped well water; reduced

capacity demand on the City's potable water system; and potential long-term improvement in potable groundwater supply.

The storm drains' monetized benefits are avoided flood damage. Applicant used FRAM to calculate expected Present Value of benefits to be \$1.9 million. Reviewer's calculation is \$1.95 million, as a result of a minor error in applicant's input table. Applicant used the default structure values for Sacramento rather than local values.

Total monetized benefits for the proposal would appear to exceed costs after the adjustments and uncertainties identified above. Several projects also provide important non-monetized benefits to DACs.

PROGRAM PREFERENCES

Applicant claims that five program preferences and eight statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty, and adequate documentation for 11 of the Preferences claimed: (1) Include regional projects or programs; (2) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR; (3) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; (4) Address critical water supply or water quality needs of disadvantaged communities within the region; (5) Drought Preparedness; (6) Use and Reuse Water More Efficiently; (7) Climate Change Response Actions; (8) Expand Environmental Stewardship; (9) Practice Integrated Flood Management; (10) Protect Surface Water and Groundwater Quality; and (11) Ensure Equitable Distribution of Benefits.